

Network Safeworking Rules and Procedures

Network Communications

Rule Number: 2007

Arc Infrastructure maintains the master for this document and publishes the current version on the Arc Infrastructure website. All changes and updates to the Network Safeworking Rules and Procedures are authorised by the Arc Infrastructure Rule Book Committee. This document is uncontrolled when printed.

Document History

Version	Effective Date	Pages updated	Reasons for change
2.01	31 10 2020	9	Example of Open Channel communications updated

Table of Contents

1.	Purpose.....	3
2.	General	3
2.1	Communication fundamentals	3
2.2	Confirmation of communication	4
2.3	Relaying Communications	4
3.	Emergency Communication	5
3.1	Emergency Radio Communications.....	5
4.	Spoken Communication	6
4.1	Spoken Numbers.....	6
4.2	Phonetic Alphabet (spoken letter names)	7
4.3	Standard Terms and Phrases.....	8
4.4	Recording Spoken Communications.....	8
5.	Spoken Communication Protocols	9
5.1	Identification	9
5.2	Open-Channel Communications.....	9
5.2.1	Example of Open-Channel Communication	9
5.3	Short Identification.....	10
6.	Written Safeworking Communication	10
6.1	Errors on Records, Safeworking Forms and Authorities	10
6.2	Written Communication Abbreviations.....	11
7.	Communications Equipment	11
7.1	Defective Equipment	11
8.	References.....	12
9.	Effective Date.....	12

1. Purpose

This rule provides protocols for the effective use of spoken and written communications between *Network Controllers*, *Track Workers*, *Rail Traffic Crews* and other users for railway operations.

2. General

Effective Communication is essential for safety in the *Network*.

Arc Infrastructure provides:

- two-way radio coverage for most of the *Network*, this includes total coverage in *Centralised Traffic Control (CTC) Territory*;
- two-way radio coverage for local communications. Local communications do not provide two-way radio communications with *Network Control*;
- *Track worker* device messaging to and from *Network Control System*;
- wayside telephones:
 - in all traffic annexes in *Centralised Traffic Control (CTC) Territory*; and
 - in most *Train Order* cabins in *Train Order Territory*.

2.1 Communication fundamentals

Communication in the *Network* must be:

- Brief and unambiguous;
- relevant to the task at hand; and
- agreed as to its meaning before being acted upon.

Communications may be spoken, written or electronic transmissions.

Communications must use the 24-hour clock to give times.

Communications Equipment used for railway operations must be tested for correct operation:

- for *Rail Traffic* prior to entry on to the *Network*; and
- for *Work on Track* prior to starting work.

2.2 Confirmation of communication

The receiver must confirm the content of a message by repeating the message back to the sender, if requested by *Network Control* or the communication is about:

- an *Occupancy Authority*;
- an instruction not to Proceed;
- *Train* running information;
- *Special Working*; or
- a *Condition Affecting The Network (CAN)*.

The receiver must not act on a spoken or written communication until the sender confirms that the message has been repeated correctly.

2.3 Relaying Communications

If it is not possible for a sender to communicate directly with an intended receiver, a *Competent Worker* may relay the content.

The content of a communication must be relayed exactly as it was received.

3. Emergency Communication

When required to communicate in an *Emergency*, workers are to use whatever communication method is available, with radio communications being the first priority.

Emergency communications must:

- start with “*Emergency, Emergency, Emergency*”;
- be given priority; and
- be answered immediately by the intended recipient.

If there is an *Emergency* message on an *Open-Channel* radio, other users of the channel must stop transmission immediately.

Unless they are answering or aiding the *Emergency* call, workers must not transmit unless they are certain no interference will result.

3.1 Emergency Radio Communications

The *Competent Worker* must:

- transmit: “*Emergency, Emergency, Emergency. This is (their identification)*”;
- give brief details about the *Emergency* and if *Emergency Services* are required;
- if there is no immediate answer, pause then;
- repeat “*Emergency, Emergency, Emergency. This is (their identification)*” and details about the *Emergency*. Keep repeating until answered;
- when a Receiver answers, give their *Location* and the *Emergency* message; and
- exchange the necessary information and directions.

4. Spoken Communication

Open-Channel communication must use the standard terms and protocols in this rule and must be acknowledged promptly.



WARNING: *Competent Workers* must not assume that a receiver has understood a message before the receiver confirms that the message has been understood.

If the meaning of a spoken communication is not understood:

- the receiver must ask that it be repeated;
- if necessary, the sender and receiver must use the phonetic alphabet and spoken numbers to clarify and confirm the message; or
- arrange alternative means to communicate with the sender.

4.1 Spoken Numbers

When transmitting numbers, a *Competent Worker* must:

- use the spoken numbers in the following table;
- stress the syllables in capital letters;
- for a decimal point, say “Day Cee Mal”.

Figure 2007-1 Spoken numbers table.

For digit	Say
0	ZEE-roh
1	WUN
2	TOO
3	thuh-REE
4	FO-wer

For digit	Say
5	FI-yiv
6	SIX
7	SEV-en
8	ATE
9	NINE-uh

4.2 Phonetic Alphabet (spoken letter names)

When it is necessary to spell words, the *Competent Worker* must use the spoken letter names in the following table.

Stress the syllables in capital letters.

Figure 2007-2 Phonetic alphabet table.

For	Letter Name	Say
A	ALPHA	AL-fah
B	BRAVO	BRAH-voh
C	CHARLIE	CHAR-lee
D	DELTA	DELL-tah
E	ECHO	ECK-oh
F	FOXTROT	FOKS-trot
G	GOLF	GOLF
H	HOTEL	hoh-TEL
I	INDIA	IN-dee-ah
J	JULIET	JEW-lee-ETT
K	KILO	KEY-loh
L	LIMA	LEE-mah
M	MIKE	MIKE

For	Letter Name	Say
N	NOVEMBER	No-VEM-ber
O	OSCAR	OSS-cah
P	PAPA	pah-PAH
Q	QUEBEC	keh-BECK
R	ROMEO	ROW-me-oh
S	SIERRA	See-AIR-rah
T	TANGO	TANG-go
U	UNIFORM	YOU-nee-form
V	VICTOR	VIC-tah
W	WHISKY	WISS-key
X	X-RAY	ECKS-ray
Y	YANKEE	YANG-key
Z	ZULU	ZOO-loo

4.3 Standard Terms and Phrases

A *Competent Worker* must only use these standard terms to convey these meanings:

Figure 2007-3 Standard communication terms.

Term	Meaning
Emergency, Emergency, Emergency.	This is an Emergency.
Correct.	Yes. You are right.
I read back.	I am going to repeat all, or part, of your statement exactly as I received it.
I say again.	I am going to repeat all, or part, of my last statement.
I spell.	I am going to use the phonetic alphabet.
Loud and clear.	Your signal is strong, and every word is understood.
Message received.	I clearly received and understood your message.
Negative.	No. Not correct.
Out.	My transmission is complete.
Over.	I have finished speaking, and I am waiting for a reply.
Read back.	Repeat all, or a specified part, of my message back to me exactly as you received it.
Receiving.	I acknowledge your call. Proceed with the message.
Say again.	Please repeat your last statement.
Speak slower.	Repeat what you said, speaking more slowly. It is hard to understand you.
Stand by.	Wait. I will be back to you soon.

4.4 Recording Spoken Communications

If spoken communication recording equipment is provided, it must be used to record *Network Control* communications.

5. Spoken Communication Protocols

5.1 Identification

Communications must begin with identification of the receiver, followed by identification of the sender.

Rail Traffic Crews communications must include the sender's *Rail Traffic* identification.

Communications from a worksite must include the sender's:

- name;
- safeworking designation; and
- location (include Structure Numbers where appropriate).

5.2 Open-Channel Communications

Competent Workers using *Open-Channel* radios must:

- except in an *Emergency*, check that the channel is not already in use before starting a transmission;
- if a reply is expected, use the term "Over" to end each statement; and
- to end each transmission, use the term "Out".

5.2.1 Example of Open-Channel Communication

Sender

Say: "(Receiver) this is (Sender), over".

Receiver

Start your reply to the person calling you with their Safeworking designation, *Location*, and/or *Rail Traffic* identification number.

Identify yourself by your Safeworking designation, *Location*, and/or *Rail Traffic* identification number.

Say: "(Sender) this is (Receiver), over".

Sender

Make your statement, ending with "Over".

Receiver

Reply, ending with "Over".

Sender and Receiver

Use standard terms as required in the communication.

Sender or Receiver

At the end of the communication say "Out".

5.3 Short Identification

A short identification may be used, after making an initial positive identification, for *Shunting* or similar operations within a yard or terminal on a dedicated *Shunting* channel.

6. Written Safeworking Communication

Competent Workers compiling Safeworking forms, *Authorities* and records must:

- complete all required items on the form;
- write clearly in permanent ink; and
- write numbers in numerals, not words, using for example “12” instead of “twelve”.

If Safeworking forms include items that have a checkbox before them, *Competent Workers* must:

- tick the box if it applies, and complete the item; or
- place a cross in the box if the item does not apply.

If forms include options, text that does not apply must have a single line drawn through it.

Unless otherwise specified, Safeworking forms and records must be kept for at least 90 days.

6.1 Errors on Records, Safeworking Forms and Authorities

Where an error has been made on a record or Safeworking form other than an *Authority* draw a single line through errors, and initial the corrections; or compile a new form.

If an error is made on an *Authority*, *Competent Workers* must act in accordance with Procedure 9016 Authorities and Forms.

6.2 Written Communication Abbreviations

Use the standard abbreviations approved by *Arc Infrastructure* in written Safeworking communications.

Figure 2007-4 Written abbreviations.

Abbreviation	Meaning
No	Number
LOCO	Locomotive
KM	Kilometre
TM	On-Track Machine
CBH	Co-operative Bulk Handling
JCT	Junction
MR	Midland Railway
AKOL	Annett's Key On Locomotive



NOTE: Section names will use station name abbreviations.

7. Communications Equipment

Communications Equipment authorised by *Arc Infrastructure*, or compatible with *Arc Infrastructure* equipment, may be used to establish *Effective Communication* in the *Network*.

Before *Rail Traffic Travels* in the *Network*, equipment to communicate with the *Network Controller* must be working correctly.

Before entering the *Network*, *Rail Traffic Crews* must be aware of:

- communication protocols; and
- radio channels for each type of Communication Equipment.

7.1 Defective Equipment

If *Network Control Communications Equipment* is defective, the *Network Controller* must:

- tell *Infrastructure Representatives* about the faulty equipment; and
- establish alternative communication methods.

If *Rail Traffic Communication Equipment* becomes defective, *Rail Traffic Crews* must:

- use a third party to relay messages; or
- use wayside Communications Equipment.

8. References

9016 Authorities and Forms

9. Effective Date

3 February 2020